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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 08/720,092      | 09/27/1996  | ROBERT E. KAHN       | 06154/008001        | 1226             |

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BOSTON, MA 02110

EXAMINER

COURTENAY III, ST JOHN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2126

38

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

08/720,092

Applicant(s)

Kahn et al.

Examiner

St. John Courtenay III

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 2, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 24-28 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-17 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 1, 18, 19, 27, and 28 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## Response to RCE

### Response to arguments (independent claim 1)

- Applicant argues that neither Steinberg nor Anthes describes or suggests controlling access to service facilities of an operating environment.

#### Examiner's response

The Examiner submits that the claimed "mobile program operating environment service facilities" do read upon the "Personal Library Systems (PLS), a miniature database for storing private notes, collected research documents, and other information" cited by Applicant in the argument set forth at the bottom of page 7 of the response (paper 37).

Steinberg teaches an operating environment running a supervisor process [e.g., administrative knowbots, page 3, line 3] that allows the mobile program indirect access to make use of the service facilities [page 3].

As previously argued, "administrative Knowbots" that "police the system, keeping unauthorized users out" must necessarily intercede between system access requests (e.g., from other "Knowbots") and the underlying local system service facilities. Steinberg teaches administrative Knowbots that police the system and keep unauthorized users out; however, authorized users are allowed access, albeit "indirect access" through "administrative Knowbots" that perform the disclosed security function.

### Response to arguments (independent claim 18)

- Applicant argues that the objects disclosed by Orfali are not "information to be interchanged as part of the communication" as claimed.

#### Examiner's response:

See the new grounds of rejection set forth below.

Applicant's arguments, filed June 2, 2003, have been fully considered but they are not deemed to be persuasive.

**Allowable subject matter**

Claims 2-4 stand objected to as being dependent upon a rejected base claim.

Claims 5-17, 24, 25, & new claim 26 (depends upon claim 9) appear to be allowable, subject to the results of a final search.

**Claim Rejections - 35 U.S.C. § 103**

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

*A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

*Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.*

Claims 1 & 28 are rejected under 35 U.S.C. § 103 as being unpatentable over Antes, Gary M., "Let your 'knowbots' do the walking," Computerworld, May 13, 1991, pp(2), in view of Steinberg, Don, "Demon knowbots (intelligent software robots)," PC-Computing, v3, n1, pp(4), Jan, 1990.

As per claim 1:

Antes discloses the invention substantially as claimed:

Antes teaches a method for use in a distributed system for processing a mobile program that has the ability to move from node to node in the distributed system [e.g., page 1, line 24].

Antes teaches including a mobile program operating environment in each of the nodes that provides service facilities (e.g., databases) useful to the mobile program [e.g., page 1, line 30].

However, Antes does not *explicitly* disclose the following additional limitations:

Steinberg teaches an operating environment running a supervisor process [e.g., administrative knowbots, page 3, line 3] that allows the mobile program indirect access to make use of the service facilities [page 3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by Antes by implementing the improvements detailed above because it would provide Antes's system with the enhanced capability of keeping unauthorized users out [e.g., page 3, line 4].

As per claim 28:

Antes, as modified by Steinberg, teaches the supervisor process prohibits unauthorized access to the service facilities of the operating environment [see page 3 - Steinberg teaches an operating environment running a supervisor process [e.g., administrative knowbots, page 3, line 3] that allows the mobile program indirect access to make use of the service facilities [page 3].

As previously argued, "administrative Knowbots" that "police the system, keeping unauthorized users out" must necessarily intercede between system access requests (e.g., from other "Knowbots") and the underlying local system service facilities. Steinberg teaches administrative Knowbots that police the system and keep unauthorized users out; however, authorized users are allowed access, albeit "indirect access" through "administrative Knowbots" that perform the disclosed security function.

Claims 18 & 19, and 27 are rejected under 35 U.S.C. § 103 as being unpatentable over Antes, Gary M., "Let your 'knowbots' do the walking," Computerworld, May 13, 1991, pp(2), in view of Steinberg, Don, "Demon knowbots (intelligent software robots)," PC-Computing,

**v3, n1, pp(4), Jan, 1990, and further in view of Markoff, John, "The staggering scope of the Internet: a thicket of networks wound 'round the globe", Digital Media, v1, n11, p19(5) April 20, 1992.**

**As per independent claim 18:**

**Andtes**, as modified by **Steinberg**, teaches the invention substantially as claimed.

**Andtes**, as modified by **Steinberg**, teaches a method for aiding communication with a mobile program executing in operating environments provided at nodes of a distributed system (as discussed above in the rejection of claim 1).

However, **Andtes & Steinberg** do not *explicitly* disclose the following additional limitations:

**Markoff** teaches maintaining a name space [e.g., '**a variety of Internet "phonebooks"**] that uniquely identifies [i.e., using an **address** and inherent associated name] types of information to be interchanged as part of the communication; and using a name [i.e., an address which can be construed as a unique identifying address or "name" in its own right, or an address that is inherently associated with a name, such as a name found within a phonebook that is comprised of types or categories of listings] within the name space to identify a type of information to be interchanged [p. 4].

**See Markoff page 4, lines 26-34:**

"Agents for browsing and retrieval. In the future, some computer scientists believe that it will be possible to devise software programs called "agents" that will automatically roam the Internet, browsing for information and retrieving it when it matches an owner's needs. One such agent - "knowledge robot" (Knowbot) - already exists. Vincent Cerf, now a researcher at the Corporation for National Research Initiatives, has designed a program that systematically searches **a variety of Internet "phonebooks"** for an **address** and then mails back the information when it finds a match."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the combined system taught by **Andtes & Steinberg** by implementing the improvements detailed above because it would provide their system with the enhanced capability of using

address listings (i.e., internet phonebooks) to browse the internet and find matching information the user is searching for [Markoff p. 4].

**As per claim 19:**

**Andtes**, as modified by **Steinberg** and **Markoff**, teaches the mobile program registers an interface [i.e., internet phonebook, p. 4] which includes the name of a type of information that is to be interchanged [e.g., **Markoff** discloses the use of an address which can be construed as a unique identifying address or “name” in its own right, or an address that is inherently associated with a name, such as a name found within a phonebook that is typically comprised of “residence” name listings and “business” name listings - page 4].

**As per claim 27:**

**Andtes**, as modified by **Steinberg** and **Markoff**, teaches the service facilities of the operating environment are used to access other resources not part of the operating environment [i.e., internet phonebook and associated addresses/names, p. 4, as discussed above in the rejection of claim 19].

## **NOTICE OF RULE CHANGE**

Effective July 30, 2003, all papers filed in the Office on or after that date will be subject to the rules changes found in the Federal Register/Vol 68, No. 125/ Monday, June 30, 2003. Certain rules changes affect patent applications filed before that date, see the Final Rule for further information. This notice can be viewed on the USPTO web site:

<http://www.uspto.gov/web/offices/com/sol/notices/68fr38611.pdf>



### How to Contact the Examiner:

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to St. John Courtenay III whose voice telephone number is (703) 308-5217. A voice mail service is also available at this number.

Normal Flex work schedule: M – F 7:30 AM - 4:00 PM

- All responses sent by U.S. Mail should be mailed to:  
**PLEASE NOTE NEW USPTO MAILING ADDRESS EFFECTIVE MAY 1, 2003**

**Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450**

- Hand-delivered responses should be brought to Crystal Park Two, 2021 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist). All hand-delivered responses will be handled and entered by the docketing personnel. Please do not hand deliver responses directly to the Examiner.

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- **AFTER-FINAL OFFICIAL faxes must be signed and sent to: (703) 746-7238.**
- **BEFORE-FINAL OFFICIAL faxes must be signed and sent to: (703) 746-7239.**

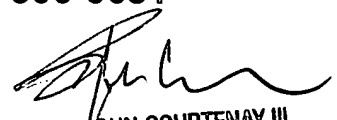
All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. See M.P.E.P. §505. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

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- Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (703) 305-3900.

**Please direct inquiries regarding fees, paper matching, and other issues not involving the Examiner to:**

**Technical Center 2100 CUSTOMER SERVICE: 703 306-5631**

The Manual of Patent Examining Procedure (MPEP) is available online at:  
<http://www.uspto.gov/web/offices/pac/mpep/index.html>

  
**ST. JOHN COURTENAY III  
PRIMARY EXAMINER  
Paper #38**